

2017 TA Teaching Excellence Award Student Comments

Ozgur Esentepe

All nominations are confidential. Some nominators agreed to release their comments. Please see below.

Please describe the impact the TA you are nominating has had on your learning experience. Please be as descriptive as possible - your comments are given the greatest weight when evaluating a TA's nomination:

During tutorial hours for MAT247, Ozgur is organized and teaches the material (Linear Algebra) in a very concise way. He explains the problem and has the class interact in order to find a solution to the problem he poses. His explanations are key to my understanding of linear algebra and is significantly better than reading the textbook due to the interaction between Ozgur and I. He is very funny and is motivated to teach other people mathematics, as well as having a passion for math. I am very surprised at how much I learn from tutorial hours.

Ozgur' is excellent at teaching mathematical problem solving. In tutorial, he very clearly guides us through difficult problems. Even though we often fail at first, Ozgur is always encouraging. He creates an environment in the tutorial so that even the most reserved students feel comfortable contributing, because he stresses that every contribution is worthwhile.

Ozgur always does his best to make sure everyone is following. Algebra is a pretty confusing topic, but he starts very slowly, marks very clearly what he is doing, and does a lot of student participation stuff where we have to answer T/F to whether certain mathematical propositions are true or not, he really pushes each of his students to answer, which can be uncomfortable, but helps learning. His explanations are clear, he's easy to approach and to stop to ask questions, and he provides a lot of examples which help to ground our intuitions.

He's also one of the nicer TAs, and he will work on problems in tutorial, the insights from which can be applied to assignments. He never tells you how to solve a problem on the problem set, but will find a problem where you can use a theorem, which can also be used on tougher assignment questions. The reason he's able to do this is that he spends time looking at our problem sets, and always prepares thoroughly for our tutorials. He actually keeps a website updated

(<http://www.math.toronto.edu/ozgures/teaching.html>) with his lecture notes. He also keeps his ear to the ground for opportunities for us as

students (Math talks/lectures going on at UofT, research opportunities, etc...). He puts in more time and effort into helping his students than any Math TA I have had.

He always talks through the 2 hour slots. We learn about applications of what we are learning to other branches of mathematics, we learn about other abstract mathematical entities, we get an honest glimpse into what it's like to be a graduate student in math, it's fantastic.

He's excellent at both explaining the basics, and helping us understand the material, and showing us where it goes.

He makes the math feel not-stupid even if it is easy reminding us of general principles (if you make a claim, give a proof! Don't be afraid to ask questions or guess!) that will be useful in all of math, and by mentioning applications of what we do to other areas of math. He also makes it feel worthwhile even if it is hard by stressing how much we learn at every step of understanding a new concept. He makes the classroom feel like a place for the students by constantly polling us and asking for input and also by saying things like that he's there for us to learn. And he's just really entertaining which makes it fun to come to class and do math. And he has enough underlying understanding to take someone's conjecture and see the shape of it so he can come up with examples or counterexamples or ideas of what it would imply very quickly.

Whenever I'm disillusioned about something math-y I can think "How would Ozgur present this topic?" and it becomes interesting again. Either I look for a new angle that makes me wonder something new, or I think of what sort of power this material will give me, or I think of its meaning relative to other concepts I've learned - because Ozgur highlights all of these in his classes.

His attitude towards learning with other people, respecting their proofs and mistakes, etc. is contagious also and has made it much easier for me to work with people even when not in tutorial.

He has continually elicited enthusiasm and excitement for Math. His approach is friendly and never convoluted, and he has always been able to answer my questions in a way that does not only satisfies me but also encourages a deeper curiosity. His teaching skills are exceptional.

Please provide a specific example from your experience with this TA that would best illustrate the TA's teaching:

Ozgur poses a question on the board. If anyone has a question, he explains the question by drawing a image to explain what the question does e.g. a linear transformation T maps from V to W and proceeds to explain how that occurs. Everything is taught in an understandable manner.

One tutorial, we finished the problems that had been prepared, so someone chose a problem at random from the textbook. None of us, including our TA, knew the answer, and it took us quite a long time to work through the answer. While Ozgur was trying to work out the problem himself, he was also facilitating discussion among the students about what avenue towards the solution to try next. Students who had never spoken in class before were offering potential solutions, and everyone felt like their contributions were meaningful. Solving this problem helped all of us understand more clearly what it means to work through a hard problem together.

Sometimes in MAT240 and 247, the course material is really abstract. You know some theorems, and some properties of things, but you don't have much of an intuitive idea of what you're working with. I was in one of these situations, but didn't really know how to word my concerns because I didn't really have a specific question. I went to tutorial, and Ozgur provided us with an example of one of these objects, and took the time to really break it down to basics, and painstakingly did all the calculations to give us a result. This was really helpful in sharpening my intuitions when it comes to algebra.

I think in the same lecture he showed us a complicated algebraic proof for the irrationality of $\sqrt{2}$, broken down into easily digestible parts., which was a REALLY surprising result.

That's classic Ozgur I think, doing the obvious stuff slowly, so we can see it and really understand it, and then showing us how it can be useful and less obvious.

"Don't be afraid that you're going to ask dumb and trivial questions. You /are/ going to ask dumb and trivial questions. Until you learn the material, every question you ask is going to be dumb and trivial." - Ozgur explaining how to let go of our vain pride so that we can learn.

Here's an example lesson structure:

We are beginning to talk about linear maps. Ozgur explains (with the help of diagrams) that a vector space is a set with a specific structure, and we like linear maps because they preserve that structure. He gives us true/false questions about linear maps and for each one he picks someone who said "false" and asks for a counterexample, and/or someone who said "true" and asks for a proof, crediting the purveyors on the board, and not making a big deal if they're wrong - being glad they participated anyway. Now that we understand it a little better, he spends 5min mentioning an application to algebraic topology, reminding us that this is just for fun and so we won't get stressed.

He encouraged everyone's input (in the form of T/F polls) and applauded people who participated, even if they made mistakes. He kept in mind the point of everything the whole way and used diagrams so we could have mental models whereby to guess (or know) the T/F questions. And he was entertaining (c.f. the quote which was actually from a different session).

He always prepares weekly problem sets and posts them on his own personal website. These problem sets are original and he is in no way required to do them. He cares about his students and is very open to feedback.

Please provide any additional comments:

Best TA I have encountered yet so far.

If he does not win, I will find out who did win and take that class... I genuinely can't imagine a better TA.